

## **AGREEMENT FOR RESEARCH SERVICES**

THIS AGREEMENT ("Agreement") is entered into as of the last signature below ("Effective Date") between Tippecanoe County Government with an address of 20 North 3<sup>rd</sup> Street, Lafayette, IN 47901 ("Sponsor") and the **Trustees of Indiana University**, an educational institution organized under the laws of the State of Indiana ("University").

WHEREAS Sponsor wishes to contract with University for certain services as described herein and University has the necessary personnel and facilities to perform the services for Sponsor in accordance with the terms below.

THEREFORE, it is agreed as follows:

### **Article 1. Scope of Work**

University will perform the services ("Services") described in Addendum A. David Bodenhamer, a University employee ("Principal Investigator"), will supervise all Services to be performed under the terms of this Agreement. In the event the Principal Investigator is unable or unwilling to continue with this project, the parties will attempt to find a mutually acceptable substitute. In the event a mutually acceptable substitute is not found, the Agreement may be terminated in accordance with Article 4.

### **Article 2. Term**

The term of this Agreement shall commence on the Effective Date and remain in effect for 12 months ("Term") unless changed by mutual consent of the parties by written amendment to this Agreement.

### **Article 3. Payment**

- 3.1. It is understood that this is a fixed price agreement. The cost to Sponsor for University's performance of the Services shall be \$10,000.00.
- 3.2. Upon presentation of an invoice, Sponsor shall make payments to University as follows:
  - Upon completion of Task 2 \$5,000.00
  - Upon completion of Task 4 \$5,000.00
- 3.3. University shall send invoices to the following Sponsor address:

Tippecanoe County Commissioner Office  
ATTN: MHMP Grant  
20 North 3<sup>rd</sup> Street  
Lafayette, IN 47901-1205

3.4. Checks should be made payable to **Trustees of Indiana University** and sent to:

Indiana University  
Office of Research Administration  
Dept. 78867  
P.O. BOX 78000  
Detroit, MI 48278-0867

Tax ID# 35-6001673

#### **Article 4. Termination**

4.1. This Agreement may be terminated by either party by providing written notice to the other party at least forty-five (45) days prior to the effective date of termination.

4.2. In the event that either party defaults or breaches any material provision of this Agreement, the other party may terminate this Agreement upon thirty (30) days written notice to the party in default or breach, provided however that if the party defaulting, breaching, or failing, within thirty (30) days of the receipt of such notice cures the said default, breach or failure, the Agreement will continue in force and effect.

4.3. In the event of early termination by either party, Sponsor shall pay the scheduled payments referenced in Article 3 through the effective date of termination plus any costs, if any, incurred by University in the performance of the Services beyond the last scheduled payment and prior to the effective date of termination.

#### **Article 5. Confidential Information**

5.1 University acknowledges that Sponsor may, prior to and during the term of this Agreement, provide University with scientific, technical, business, or other information which is treated by Sponsor as confidential or proprietary ("Confidential Information"). In recognition that University is a non-commercial, academic institution, Sponsor agrees to limit to the extent possible the delivery of confidential information to University. Both parties agree that in order to ensure that each party understands which information is deemed to be confidential, all Confidential Information will be in written form and clearly marked as "Confidential," and if the Confidential Information is initially disclosed in oral or some other non-written form, it will be confirmed in writing and clearly marked as "Confidential" within thirty (30) days of disclosure. University shall hold such Confidential Information in strict confidence and shall treat such information in the same manner as it treats its own confidential information. The University retains the right to refuse to accept any such information or data from Sponsor which it does not consider to be essential to the completion of the Research Project or which it believes to be improperly designated, for any reason. The Confidential Information provided to University by Sponsor will remain the property of the Sponsor, and will be disclosed only to those persons necessary for the performance of this Agreement. No indirect or consequential damages or damages based on loss of profits or market share are contemplated or recoverable for breach of confidentiality.

5.2 The obligation of University to maintain confidential under this Agreement will survive its expiration or termination and will endure for five (5) years from the date of disclosure.



5.3 The obligation of non-disclosure will not apply to any part of the Information that:

- (a) is already known to University prior to the effective date, as evidenced by University's records;
- (b) becomes publicly known without the wrongful act or breach of this Agreement by University;
- (c) has been or is disclosed to University by a third party who was not, or is not, under any obligation of confidence or secrecy to Sponsor at the time said third party discloses to University, or has the legal right to do so;
- (d) is developed independently by employees of University who had no access to or knowledge of the Information, as evidenced by University's records;
- (e) is approved for release by written authorization of the Sponsor;
- (f) is required to be disclosed by law or governmental regulation or to any governmental entity with jurisdiction, provided University promptly notifies Sponsor, if reasonably practical or possible, in writing of such lawful disclosure.

#### **Article 6. Publication**

Sponsor acknowledges that the free dissemination of information is an important policy of University. In accordance with its policies, University is free to publish, present, or use any data or results arising out of the performance of this Agreement for its own publication, presentation, instructional or non-commercial research objectives provided that the publication, presentation or use does not disclose any Confidential Information furnished by Sponsor. University agrees that any proposed publication or presentation relating to the Services conducted under this Agreement will be submitted to Sponsor for review at least thirty (30) days prior to submission for publication or presentation to remove Confidential Information. As such, the scope of Confidential Information in this publication context does not include the results arising out of the performance of this Agreement. In the event that the proposed publication or presentation contains patentable subject matter that needs protection, University will, upon written request received from Sponsor within the thirty (30) days review period, delay the publication or presentation for a maximum of an additional ninety (90) days to allow Sponsor or University to file a patent application.

#### **Article 7. Intellectual Property**

- 7.1 University will promptly disclose to the Sponsor all developments and inventions, whether or not patentable, conceived or first reduced to practice as a result of the Services ("Inventions"). Inventorship of any Inventions shall be determined in accordance with U.S. patent law (if patentable) or by mutual agreement between the parties (if not patentable), taking into account any applicable U.S. federal or state law, and the role and contributions of individuals involved. Ownership shall be determined in accordance with inventorship. In the case of joint ownership, both parties agree to negotiate a joint invention agreement, which shall provide, *inter alia*, for the sharing of patent costs, income, and invention management responsibilities.
- 7.2 Title to, and the right to determine the disposition of, any copyrights or copyrightable material, first produced or composed in the performance of this Research Project, shall remain with the University.

7.3 The parties shall not disclose or record this Agreement or an excerpt of this Agreement in the U.S. Patent Office unless the party wishing to make such recordation obtains the prior written permission of the other party.

#### **Article 8. Indemnification by Sponsor**

Sponsor will defend, indemnify and hold harmless University, its affiliated institutes and hospitals, and its trustees, officers, employees, agents, and third parties acting on its behalf or with its authorization from any and all suits, actions, claims, demands, judgments, costs or liabilities arising from Sponsor's use of the data, results, deliverables or materials generated by University's performance of the Services.

#### **Article 9. Merger**

This Agreement supersedes all prior oral and written proposals and communications and sets forth the entire agreement of the parties with respect to the subject matter hereof.

#### **Article 10. No Warranty**

UNIVERSITY MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, AS TO ANY MATTER INCLUDING BUT NOT LIMITED TO THE CONDITION OR QUALITY OF ANY DELIVERABLES OR THEIR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

#### **Article 11. Modifications**

Any modification to this Agreement shall be in writing and signed by both Sponsor and University.

#### **Article 12. Publicity**

The parties agree that neither party will use the names or trademarks of the other party, nor any adaptation thereof in any advertising, promotional or sales activities without prior written consent obtained from the other party.

#### **Article 13. Independent Contractors**

Nothing contained herein will be construed as establishing an employer-employee, joint venture, or principal-agent relationship between the parties.

#### **Article 14. Miscellaneous**

14.1. The headings in this Agreement are intended solely for convenience or reference and will be given no effect in the construction or interpretation of this Agreement.

14.2. This Agreement, including attached appendices, supersedes all prior oral and written proposals and communications, if any, and sets forth the entire agreement of the parties with respect to the subject matter hereof and may not be altered or amended except in writing, signed by an authorized representative of each party hereto. The terms in this Agreement take precedence over the protocol.



- 14.3. The construction and enforcement of this Agreement will be governed by the laws of the State of Indiana, United States of America, without regard to principles of choice of law. The parties acknowledge that this contract is entered into and will be performed in Indiana.
- 14.4. No waiver of any default, condition, provision or breach of this Agreement will be deemed to imply or constitute a waiver of any other like default, condition, provision or breach of this Agreement.
- 14.5. If any paragraph, term, condition or provision of this Agreement will be found, by a court of competent jurisdiction, to be invalid or unenforceable, or if any paragraph, term, condition or provision is found to violate or contravene the laws of the State of Indiana, then the paragraph, term condition or provision so found will be deemed severed from this Agreement, but all other paragraphs, terms, conditions and provisions will remain in full force and effect.

#### **Article 15. Notices**

Notices to be provided between the parties shall be provided to the following individuals for each party:

#### **SPONSOR:**

Tippecanoe County Board of Commissioners  
Thomas P. Murtaugh, President  
20 North 3<sup>rd</sup> Street  
Lafayette, IN 47901-1205

#### **UNIVERSITY:**

##### **Programmatic Notices:**

The Polis Center at IUPUI  
School of Informatics and Computing – Indianapolis  
Attn: David Bodenhamer

535 West Michigan Street  
Indianapolis, IN 46202  
Phone: 317-274-2455  
Email: [intu100@iupui.edu](mailto:intu100@iupui.edu)

##### **Contractual and Financial Notices:**

Office of Research Administration  
Indiana University  
980 Indiana Avenue, Room 2232  
Indianapolis, IN 46202-2915  
Phone: (317) 278-3473  
Fax: (317) 274-5932  
Email: [iuaward@iu.edu](mailto:iuaward@iu.edu)

The parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

**UNIVERSITY**

**SPONSOR**

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Name:

Title:

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Name: Thomas P. Murtaugh

Title: President, Tippecanoe Co Board of Commissioners

**PRINCIPAL INVESTIGATOR** (read and acknowledged)

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

Name: David Bodenhamer

Title: Executive Director, Polis Center

## **Statement of Work**

### **Overview**

The Polis Center (“Polis”) at Indiana University – Purdue University Indianapolis will update the Tippecanoe Vulnerability Analyses Report written in 2015 using the most up-to-date mapping data, modeling data, and local community records.

The report will contain the following sections:

1. Introduction
2. Tornado Analysis
3. Flood Analysis
4. Earthquake Analysis
5. Hazardous Materials Release Analysis

Overall County Responsibility:

- Provide a list of essential facilities in the county, along with their location. Preferred data format is shapefile, but a spreadsheet with addresses or latitude/longitude information will be acceptable. Essential facilities include schools, medical care facilities, fire stations, police stations, and emergency operations centers.
- Provide a list of critical facilities in the county, along with their location. Preferred data format is shapefile, but a spreadsheet with addresses or latitude/longitude information will be acceptable. Critical facilities can include facilities such as airports, communication, dams, electrical power, hazardous materials, runways, and wastewater.
- Suggest a realistic location for a hazardous materials release along with the type of hazardous material.

### **Task 1 – Project Kick-Off**

Polis will reach out to the Sponsor PM to determine a day and time for the initial kick-off meeting. During this meeting, Polis will review the 2015 Tippecanoe Vulnerability Analyses Report and confirm which information will be updated as well as which data will be used.

Polis Deliverables:

- Sample spreadsheet and shapefiles of critical and essential facilities.

County Responsibilities:

- Attend kick-off call.
- Provide required critical and essential facilities list within 2 weeks of meeting.
- Provide building footprints, if available, within 2 weeks of meeting.
- Provide hypothetical location of a hazardous materials release along with the type of material released.
- Provide hypothetical tornado track for analysis, if desired.



## **Task 2 – Analysis**

Polis will perform the various analyses using the following data:

- Critical and essential facilities locations provided by the county.
- Hypothetical hazardous material location provided by the county.
- Hypothetical tornado track, if desired. If not, Polis will either use the track of a previous tornado that has affected the county or create a track.
- Building footprints provided by the county, if available. If not available the Bing building footprints from 2018 (<https://github.com/Microsoft/USBuildingFootprints>) will be utilized.
- Parcel polygons provided by Tippecanoe County for the 2020 Indiana Data Harvest.
- Assessor data provided by Tippecanoe County to the Indiana Department of Local Government Finance (DLGF) in 2020.
- Most up-to-date official flood boundaries from the Indiana Department of Natural Resources.
- Best available flood boundaries from the Indiana Department of Natural Resources.

The following analyses will be conducted:

- Tornado: using a hypothetical tornado track, determine the building losses and essential and critical facilities damages.
- Flood: using Hazus-MH software, estimate the 1%-annual-chance flood damages for the county. The analysis will use the centroid of the largest building structure in each parcel. If there is no building in the parcel, the parcel centroid will be used. The DLGF data will be used to assign values to each property. The report will include estimates of damaged buildings along with cost, as well as critical and essential facilities.
- Earthquake: using Hazus-MH software, 3 earthquake scenarios will be run: a 7.6 magnitude earthquake in the Mississippi Valley region (New Madrid fault system), a 7.3 magnitude earthquake in southeastern Illinois (Wabash Valley fault system), and a probabilistic 500-year scenario. The report will include estimates of damages to buildings and critical and essential facilities.
- Hazardous materials release: using Aloha software and the hypothetical hazardous materials release location, a potential release will be analyzed and the plume modeled. Structures and critical and essential facilities will be analyzed to determine the impact.

## **Task 3 – Draft Report**

Once the analyses have been completed, the report will be updated to provide descriptions of the analyses performed along with maps and tables showing the results. The draft report will be provided to the Sponsor PM for review and feedback.

Deliverables:

- Draft report
- Meeting review feedback with Sponsor PM



County responsibilities:

- Review draft report within 2 weeks of delivery

#### **Task 4 – Final Report**

Based on the feedback provided by the Sponsor PM, the report will be updated and finalized. The report will be provided in Word format.

Deliverables:

- Final report in Word format.

County responsibilities:

- Include the report in the county's updated Multi-Hazard Mitigation Plan.

#### **Proposed Timeline**

The proposed timeline below assumes that the County will provide the information as detailed in the above sections within the stated timeframe.

Month 1: Task 1

Month 2-3: Tasks 2 and 3

Month 4: Task 4

